

LISTING OF CLAIMS:

- 1 1. (Currently Amended) Apparatus for automatically dispensing a fluid comprising:
2 a) a container adapted to carry a supply of fluid;
3 b) a valve connected to said container, wherein actuation of said valve
4 dispenses the fluid;
5 c) an apparatus position indicator ~~proximally associated with said container;~~
6 d) an object sensor positioned near said valve, wherein said object sensor
7 monitors an area below where said valve dispenses, wherein upon detection
8 of an object, said valve dispenses the fluid; and
9 e) wherein ~~[[the]]~~ during initial positioning of the apparatus in an area,
10 ~~activates said apparatus position indicator, such that said apparatus position~~
11 ~~indicator generates~~ provides an ~~appropriate signal until said~~ indication
12 when said object sensor is properly positioned in said area.

- 1 2. (Previously Presented) The apparatus according to Claim 1, wherein said apparatus
2 position indicator includes at least one illumination device that illuminates when said
3 object sensor is properly positioned in said area.

- 1 3. (Previously Presented) The apparatus according to Claim 1, wherein said apparatus
2 position indicator includes at least one illumination device that illuminates until said
3 object sensor is properly positioned in said area.

- 1 4. (Currently Amended) A method for installing an automated fluid dispenser,
2 comprising:
3 a) providing a fluid dispenser, ~~for carrying a container, a valve connected to~~
4 ~~said container wherein actuation of said valve dispenses a fluid carried by~~
5 ~~said container when installed,~~ an apparatus position indicator carried by
6 said fluid dispenser, and an object sensor ~~positioned near said valve~~ carried
7 by said fluid dispenser;
8 b) connecting a power source to at least said apparatus position indicator and
9 said object sensor;
10 c) positioning said fluid dispenser in at least one prospective mounting
11 location;

- 12 d) emitting from said object sensor a test signal to ensure proper positioning
13 of said fluid dispenser; and
14 e) if necessary, repeating steps c) and d) until said apparatus position indicator
15 provides ~~a positive~~ an indication ~~of said fluid dispenser's placement~~ that
16 the prospective mounting location is a proper mounting location.

- 1 5. (Currently Amended) The method according to Claim 4, further comprising:
2 marking a position of said fluid dispenser's ~~positive placement~~ proper
3 mounting location; and
4 permanently installing said fluid dispenser at said position.

- 1 6. (Currently Amended) The method according to Claim ~~[[5]]~~ 4, further comprising:
2 installing ~~[[said]]~~ a container in said fluid dispenser.

- 1 7. (Currently Amended) Apparatus for dispensing a measured quantity of fluid,
2 comprising:
3 a) an object sensor;
4 b) a container carrying a supply of fluid;
5 c) a dispense mechanism coupled to said container to control an amount of the
6 fluid to be dispensed;
7 d) a pump actuator mechanism coupled to said object sensor, wherein
8 detection of an object by said object sensor cycles said pump actuator
9 mechanism to engage said dispense mechanism which dispenses a
10 measured quantity of the fluid;
11 e) a processor coupled to said object sensor and said pump actuator to control
12 at least one operating feature maintained thereby; and
13 f) a hidden switch carried by ~~[[said container]]~~ the apparatus, wherein
14 actuation of said hidden switch places said processor in an operational
15 feature mode that enables modification of said at least one operating
16 feature.

- 1 8. (Original) The apparatus accordingly to Claim 7, further comprising:
2 at least one illuminating indicia connected to said processor wherein entry into
3 said operational feature mode is indicated by said at least one illuminating indicia.

- 1 9. (Original) The apparatus according to Claim 8, further comprising:
2 at least two lights, wherein said lights are sequentially illuminated to indicate
3 where an object should be placed for receipt of the fluid; and
4 wherein entry into said operational feature mode allows enablement or
5 disablement of said at least two lights.
- 1 10. (Currently Amended) The apparatus according to Claim ~~[[8]]~~ 7, wherein entry into
2 said operational feature mode allows selection of a number of cycles of said pump
3 actuator mechanism to control an amount of dispensed fluid upon detection of an
4 object.
- 1 11. (Currently Amended) The apparatus according to Claim ~~[[8]]~~ 7, wherein entry into
2 said operational feature mode allows selection of a size of said dispense mechanism.
- 1 12. (Currently Amended) The apparatus according to Claim ~~[[8]]~~ 7, further comprising:
2 a low level indicator connected to said processor,
3 wherein entry into said operational feature mode allows selection of a number
4 of cycles of said pump actuator mechanism to control an amount of dispensed fluid
5 upon detection of an object,
6 wherein entry into said operational feature allows selection of a size of said
7 dispense mechanism, and
8 wherein said processor calculates when the fluid in a given size of container
9 will be depleted to a predetermined level based upon said number of cycles and size
10 of said dispense mechanism.
- 1 13. (Currently Amended) The apparatus according to Claim ~~[[8]]~~ 7, further comprising:
2 a timer connected to said processor, said timer initiated upon actuation of said
3 hidden switch to allow for servicing of the apparatus.
- 1 14. (Original) The apparatus according to Claim 13, wherein said object sensor is
2 disabled while said timer is running.

- 1 15. (Original) The apparatus according to Claim 14, wherein said object sensor is re-
2 enabled upon either expiration of said timer or re-actuation of said hidden switch.
- 1 16. (Currently Amended) Apparatus for dispensing a measured quantity of fluid,
2 comprising:
- 3 a) a container carrying a supply of fluid;
4 b) a dispense mechanism coupled to said container to control an amount of the
5 fluid to be dispensed;
6 c) a pump actuator mechanism coupled to an object sensor, wherein detection
7 of an object by said object sensor cycles said pump actuator mechanism to
8 engage said dispense mechanism which dispenses a measured quantity of
9 the fluid; and
10 d) a timer ~~having a predetermined period of time, said timer~~ associated with
11 said dispense mechanism, ~~said timer actuated upon dispensing of said fluid~~
12 ~~from said dispense mechanism, wherein said dispense mechanism is~~
13 ~~disabled if a predetermined number of dispense events occur within said~~
14 ~~predetermined period of time~~ said timer being utilized to disable said
15 dispense mechanism to mitigate excessive dispensing of the fluid.
- 1 17. (Currently Amended) The apparatus according to claim [[16]] 27, wherein said
2 dispense mechanism is re-enabled upon completion of a second period of time.
- 1 18. (Currently Amended) The apparatus according to claim [[17]] 27, wherein said
2 predetermined period of time is about 15 seconds ~~and said predetermined number of~~
3 ~~dispense events is about 5.~~
- 1 19. (Original) The apparatus according to claim 17, wherein said second period of time
2 is about 45 seconds.
- 1 20. (Canceled)
- 1 21. (Currently Amended) Apparatus for dispensing a measured quantity of fluid,
2 comprising:
3 an object sensor which generates an object signal upon detection of an object;
4 a container carrying a supply of fluid;

5 a dispense mechanism coupled to said container to control an amount of the
6 fluid to be dispensed;

7 a pump actuator mechanism ~~coupled to said object sensor~~, wherein detection of
8 an object by said object sensor cycles said pump actuator mechanism to engage said
9 dispense mechanism which dispenses a measured quantity of the fluid and wherein
10 said pump actuator mechanism converts rotational motion to linear motion to cycle
11 said dispense mechanism;

12 a control circuit having a processor to receive said object signal, wherein said
13 processor generates a cycle signal received by said pump actuator mechanism to
14 actuate said dispense mechanism;

15 ~~a motor carried by said pump actuator mechanism~~ having a motor for cycling
16 said pump actuator mechanism, ~~wherein a motor drive input signal is generated by~~
17 ~~said processor~~ said motor having a drive input; and

18 ~~a motor position sensor coupled to said pump actuator mechanism to detect an~~
19 ~~end of dispense cycle~~, ~~said motor sensor detecting a position of said motor and~~
20 ~~[[generating]]~~ generate a brake input signal when said ~~motor position~~ end of
21 dispense cycle is detected;

22 wherein generation of said brake input signal connects said motor drive input
23 signal to ground to effectively brake said ~~motor~~ pump actuator mechanism.

1 22. (Currently Amended) Apparatus for dispensing a measured quantity of fluid,
2 comprising:

3 an object sensor which generates an object signal upon detection of an object;

4 a container carrying a supply of fluid;

5 a dispense mechanism coupled to said container to control an amount of the
6 fluid to be dispensed;

7 a pump actuator mechanism ~~coupled to said object sensor~~, wherein detection of
8 an object by said object sensor cycles said pump actuator mechanism to engage said
9 dispense mechanism which dispenses a measured quantity of the fluid and wherein
10 said pump actuator mechanism converts rotational motion to linear motion to cycle
11 said dispense mechanism;

12 a control circuit having a processor to receive said object signal, wherein said
13 processor generates a cycle signal received by said pump actuator mechanism to
14 actuate said dispense mechanism[[:]]

15 ~~a motor carried by said pump actuator mechanism~~, wherein ~~a motor drive~~
16 ~~signal is generated by said processor to actuate said~~ cycle signal is used to drive a
17 motor and said pump actuator mechanism; and
18 an overload circuit carried by said control circuit, wherein if said overload
19 circuit detects a voltage value in excess of a predetermined threshold, an overload
20 signal is generated and received by said processor which in turn stops generation of
21 said motor drive signal.

1 23. (Currently Amended) Apparatus for dispensing a measured quantity of fluid,
2 comprising:
3 an object sensor which generates an object signal upon detection of an object;
4 a container carrying a supply of fluid;
5 a dispense mechanism coupled to said container to control an amount of the
6 fluid to be dispensed;
7 a pump actuator mechanism ~~coupled to said object sensor~~, wherein detection of
8 an object by said object sensor cycles said pump actuator mechanism to engage said
9 dispense mechanism which dispenses a measured quantity of the fluid and wherein
10 said pump actuator mechanism converts rotational motion to linear motion to cycle
11 said dispense mechanism; and
12 a control circuit having a processor to receive said object signal, said control
13 circuit comprising a sensor circuit for ~~[[carrying]]~~ said object sensor, and a systems
14 circuit for ~~[[carrying]]~~ said processor, wherein said sensor circuit and said systems
15 circuit are maintained on their own respective circuit boards to minimize interference
16 therebetween, and wherein said processor generates a cycle signal received by said
17 pump actuator mechanism to actuate said dispense mechanism.

1 24. (Original) The apparatus according to said Claim 23, wherein each said respective
2 circuit board functions as a shielded backplane.

1 25. (Currently Amended) An apparatus for dispensing a measured quantity of fluid
2 comprising:
3 a housing adapted to carry a container that carries a supply of fluid;
4 a dispense mechanism adapted to be coupled to the container to control an
5 amount of the fluid to be dispensed;

6 an object sensor carried by said housing;
7 a pump actuator mechanism coupled to said object sensor, wherein detection of
8 an object by said object sensor cycles said pump actuator mechanism to engage said
9 dispense mechanism which dispenses a measured quantity of the fluid, wherein said
10 pump actuator mechanism shuts down if said object sensor detects excessive use.

1 26. (Previously Presented) The apparatus according to claim 25, further comprising:
2 a dispense timer having a dispense time period; and
3 a disable timer having a disable time period, wherein both said dispense timer
4 and said disable timer are associated with said pump actuator mechanism such that
5 during said dispense time period if a predetermined number of dispense events are
6 detected, said pump actuator mechanism is disabled for said disable time period.

1 27. (New) The apparatus according to claim 16, wherein the dispense mechanism is
2 disabled after a predetermined time period if a predetermined number of dispense
3 events occur within said predetermined period of time.

1 28. (New) The apparatus according to claim 1, wherein said apparatus position
2 indicator provides an indication when said object sensor is properly positioned in
3 said area and a different indication when said object sensor is improperly positioned.

1 29. (New) The apparatus according to claim 7, wherein entry into said operational
2 feature mode allows a modification associated with a type of the fluid in said
3 container.